From: Leena Lothe To: BRITTAIN, ERIN

CC: John Mundell; Evanoff, Stephen (Denver)

Sent: 10/27/2009 4:20:34 PM

Subject: RE: Michigan Plaza: Sewer Line Investigation

I will send you a hard copy in the next couple days Erin...thanks!

From: BRITTAIN, ERIN [mailto:EBRITTAI@idem.IN.gov]

Sent: Tuesday, October 27, 2009 10:17 AM

To: Leena Lothe

Cc: John Mundell; Evanoff, Stephen (Denver)

Subject: RE: Michigan Plaza: Sewer Line Investigation

Hi Leena.

Thanks for sharing the information you have gathered so far. I agree that it makes sense to hold off on the sewer line investigation for now. Please send me a hard copy summary so that I have a formal submittal to put in the file.

Thanks,

Erin Brittain Voluntary Remediation Program Project Manager Indiana Department of Environmental Management 317/233-2991 ebrittai@idem.IN.gov

From: Leena Lothe [mailto:llothe@mundellassociates.com]

Sent: Tuesday, October 27, 2009 9:40 AM

To: BRITTAIN, ERIN

Cc: John Mundell; Evanoff, Stephen (Denver); Leena Lothe

Subject: Michigan Plaza: Sewer Line Investigation

Good Morning Erin,

As discussed in our recent meeting on October 15th, we looked into the sewer line on Michigan Street going west towards Holt road and found the following:

The sewer line proceeding west on Michigan Street goes just west across Holt and immediately Ts North (see attached). There seem to be no other sewer lines in the area west of Holt and Michigan.

Per the *Department of Public Works (DPW)*, the closest sewer line to the residential area (with vinyl chloride impacts) by the intersection of Cossell Road and Vermont Street is to the northeast of the area of interest, by Michigan and Holt. However, the line runs East from that intersection. The other line is by the intersection of Arthur and Vermont Streets. A manhole is located at that intersection, with the line running south. This line seems to be privately-owned. Looking at the distance between this residential area and the nearby sanitary sewer line locations, it is less likely that these houses would be connected to either of those lines. Since these houses are not on city water, these could likely be on septic systems.

The *Indianapolis Water Company* was contacted since IWC seems to be servicing that general vicinity, and it was verified that these residences are currently not receiving any sewer bills, thus indicating they might not be connected to a sewer line. The addresses verified included 4018 W Vermont and 4042 W Vermont.

Health and Hospital Corporation, MCHD was contacted to verify if there was any information available regarding septic systems for any of these residences. The HHC only has drawings and locations of septic systems of parties who apply for a permit for septic systems, and they did not have any such records for these residences. However, not all septic systems have a permit in place.

Given the above there doesn't seem to be a realistic link between the sewer line on Michigan and Holt and any of the homes. Even if there was some release from this sewer, it would not have proceeded to impact the houses especially at such great depth (35 and 75 feet). Also, groundwater flow direction from this sewer line heading north would be to the southwest towards Big Eagle Creek, and would miss those residential wells.

Other considerations -

- 1) No indications of shallow PCE/TCE in these areas (including Keramida well MW-170).
- 2) The greatest impacts are deep and only show VC. VC is caused by the breakdown of PCE/TCE/cis under anaerobic environments (deeper in the aquifer).

Please let us know your thoughts. Thanks!
Leena

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